Chapter 3
Transition from High School to Adulthood for Adolescents and Young Adults with Autism Spectrum Disorders

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Transition from High School to Adulthood for Adolescents and Young Adults with ASD

Our society considers graduation from high school as a key turning point in the lives of young people. Not only does it mark the transition from high school into college or the workforce, but it also symbolizes the transition from adolescence to adulthood (Kline & Williams, 2007; Pyle & Wexler, 2011). For many adolescents, finishing high school marks the start of autonomous decision-making in daily life. In their path of practicing "adulthood," students use high schools and experiences associated with it as a "rite of passage experience" (Collinson & Hoffman, 1998). Students appreciate being trusted with greater responsibilities while still needing guidance from adults. Teachers, parents, and other professionals working with adolescents should encourage them to begin taking on adult responsibilities as well as providing them with guidance during this transition period (Elias, 2009). Unfortunately, far too many students do not receive an education that adequately prepares them for life after high school. Many schools focus on academic progress and pay little attention to the development of other skills that are essential for adult life. Consequently, many students leaving high school are inadequately prepared to handle adulthood (Conley et al., 2010; Floyd, Costigan, & Piazza, 2009; Kline & Williams, 2007).

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This is particularly true for youth and young adults with autism spectrum disorders (Schall & McDonough, 2010; Taylor & Seltzer, 2010; Wehman, Smith, & Schall, 2009). Recent reviews of outcomes for individuals with ASD through the National Longitudinal Transition Study-2 (NTLS2) have indicated that, as a group, individuals with ASD have low rates of employment, independent living, and lifelong friendships (Newman, Wagner, Cameto, & Knokey, 2009). This longitudinal study followed 11,000 transition-aged students with disabilities from 2001 to 2009. The age range of youth and young adults included in this study were between 13 and 26. This sample included 922 students with autism spectrum disorders. Outcomes recorded for this sample included the following findings (Hendricks & Wehman, 2009; Shattuck, Wagner, Narendorf, Sterzing, & Hensley, 2011; Taylor & Seltzer, 2010; Wehman et al., 2009, 2012):

- 32 % of this sample attended post-secondary education of one type or another
- Only 6 % achieved competitive employment
- 21 % had no job or post-secondary education experiences at all
- 80 % continued to live with their parents
- 40 % reported having no friends
- 9 % had no form of health insurance

Taylor & Seltzer also found that, of a sample of 66 young adults with ASD, the majority attended sheltered workshops, day activity centers, or had no structured day activities at all (2010). Taken as a whole, these data indicate that, largely, individuals with ASD do not currently experience the autonomy or independence expected of youth transitioning to adulthood. On the contrary, individuals with ASD continue to be dependent on their families for providing basic needs, financial support, housing, day supervision and support, and companionship. Finally, Shattuck, et al., completed a follow-up comparison of outcomes for individuals with ASD to those identified with intellectual disabilities (ID, formerly categorized as mental retardation), speech language impairment (SLI), and learning disabilities (LD; 2012). These findings showed that individuals with ASD had poorer outcomes in employment and post-secondary education when compared with the other three disability groups. While outcomes improved over time, the ASD group still lagged behind their peers in the other three disability groups for nearly 7 years post-graduation. Specifically, at approximately 7 years post-high school graduation, 35 % of young adults with ASD had no employment or post-secondary education compared to 26 % of young adults with ID, 7 % of young adults with SLI, and 3 % of young adults with LD.

While these reported outcomes portray a bleak picture, there is evidence that individuals with ASD can learn to live, work and become contributing members of their communities (Hurlbutt & Chalmers, 2004; Schall, Target, Cortijo-Doval, & Wehman, 2006; Wehman et al., 2012; Wehman, Targett, & Richardson, 2012). Thus, it is important to understand how the characteristics of ASD affect the adolescent and the critical components of transition educational programs that result in better outcomes for individuals with ASD. In this chapter, we will review the impact of ASD on the adolescent, specifically as it relates to achieving better outcomes

upon transition from high school to higher education and work. Additionally, we will discuss transition to independence in community integration and living as well as collaboration with adult services agencies to provide the necessary supports and services to ensure better outcomes for individuals with ASD.

Critical Transition Issues for Youth and Young Adults with ASD

Consider the following scenarios describing youth with ASD.

> Daniel likes to talk about trains; including train schedules, types of train engines, changes in trains throughout history, and various train systems across the world. He likes to talk about this so much that he includes information about trains in every conversation he has. In his English class, while discussing *Romeo and Juliette*, Daniel started talking about the Trenitalia, (the Italian train system) and its schedule in Verona, Italy. Rather than being a part of the conversation, it is as if Daniel is giving a lecture about trains. His peers audibly groaned and rolled their eyes. Daniel continued to talk about Italian train schedules until the teacher stopped him.
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> Whenever another student in his high school attempts to work with Jim in partner or team assignments, Jim turns from them and walks away while whining and flapping his hands. The other students think that Jim does not like them and, consequently, do not include him in their activities. In fact, Jim is just responding to a social interaction that is spontaneous, thus surprising and unexpected.
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> At school, Jane overheard another student, Susan, talking about how ugly a third student, Emily's clothing was. Jane, a youth with Aspergers disorder, agreed with the assessment that the clothing was not attractive for Emily. Therefore, feeling that it was wrong to gossip about another person, Jane proceeded to tell Emily that the outfit she was wearing was unattractive on her. When Emily burst into tears at the confrontation, Jane was shocked to learn that Emily was offended by her honesty. In fact, during a meeting with her guidance counselor, Jane expressed her dismay with Emily's response. She said that she was following the 'rule of friendship' that states, 'Real friends will tell you the truth.'
>
> Justin was completing his math at his desk when his teacher stopped to observe him work the problem for a moment. He noticed that Justin was completing the problem incorrectly and said while he bent down to correct him, 'Let me help you with this one.' Justin said in a loud monotones voice, 'I am doing it right! Back off!'

In each of these three scenarios, these students are demonstrating the very characteristics of ASD that will act as a barrier to independence in employment, higher education, and community integration (Billstedt, Gillberg, & Gillberg, 2005; Hendricks & Wehman, 2009; Hurlbutt & Chalmers, 2004; Schall, Wehman, & McDonough, 2012). Specifically, in each case, these students demonstrate social communication challenges that make it difficult for them to interact with others. In fact, it is frequently social and communication challenges, more often than insistence on rituals or routines, that create challenges in the workplace.

In a school setting, these behaviors seem eccentric and perhaps annoying. In a workplace, however, these behaviors could lead to contention, disagreement, and reduced productivity among co-workers. Eventually, employers become less tolerant of such behaviors that cause a breakdown in teamwork among employees.

Employers may reduce the hours of the worker with ASD and eventually may seek to lay off such an employee. Employers view these seemingly subtle social communication errors as much more problematic in the workplace. Yet, educators may not know how to intervene to change these patterns of behavior or, even worse, may not identify these as requiring intervention at all. Consequently, it is important for researchers to identify and teach educators to implement evidence-based practices to address these social communication challenges (Schall et al., 2012).

In addition to these social communication challenges, youth and young adults with ASD are not adept at a number of coping skills that might mitigate these challenges. When Justin tells his teacher to "Back off," he is not accepting correction. When Jane tells Emily that she doesn't look good in her outfit, she is not suppressing information that should be kept private. When Daniel talks endlessly about trains, he is not attending to his listener's verbal and nonverbal cues about their interest in the topic. When Jim runs from peer interaction, he is not engaging with peers to complete assigned tasks. Educators can analyze all of these skills, break them into smaller skills, and teach them systematically to mastery and fluency. These scenarios demonstrate some of the issues that individuals with ASD face in transition to adulthood. That is, they frequently lack the social and communication skills to interact with others in collaborative work or social situations.

These primary challenges often lead to behavior problems at work or in school settings. When Justin yells, "Back off!" he may be considered difficult at work or in higher education classes. Jane's interaction with Emily may be seen as insulting or rude. When Daniel talks on and on about trains, his employer may see him as uninterested. These challenges may escalate to arguments in the workplace and, thus result in verbal or physical altercations with co-workers or employers. This is precisely the kind of issues that result in employees with ASD's suspension from work or university due to failure to follow policy. Consequently, it is critical for transition teams to address these eccentric behaviors from the perspective of future employers or professors.

Making this shift from addressing characteristics of ASD that impact the current school environment to anticipating and addressing behaviors that may become challenging in a work or university environment requires careful transition planning and shifting individualized education plan (IEP) priorities. In fact, much of the educational planning process for students with ASD tends to be deficit focused in the early years of school. Through preschool and into elementary school, IEP teams frequently review a list of missing skills or behaviors and write programs to address these deficit areas. At the point that the individual student with ASD in preparing for his or her transition to adulthood, however, the priority must shift from skills that the student cannot currently perform to skills that the individual will require in adulthood. To be specific, if a student with ASD had not mastered mathematics skills to the fourth grade level by the time he or she reaches the age of 14, it is time to move on and leave those early mathematics skills behind. Instead, the team must refocus on the math, reading, and independent skills that the student can complete in order to be successful as an employee, friend, and active community member (Wehman & Kregel, 2012). Thus, instead of teaching such a student the procedure

for long division, it is more important to teach the student the procedure for taking public transportation from one point to another. Note that we are not suggesting that the IEP teams leave all academic skill development behind. In fact, a person who is taking public transportation from one point to another has to read the schedule and signs around him or her, provide payment for the use of the transportation, maintain safety while interacting appropriately with others, and observe their community to identify their stops. All of these activities involve academic skills that are embedded in functional tasks. Thus, a key issue for transition-aged students with ASD is to embed literacy in functional skill tasks.

Consider the needs of students with ASD who are academically more able. Consider someone like Daniel or Jane. Both of these students appear to have grade level or above academic skills. Shouldn't their IEP teams continue to focus on academics and not shift the focus of their curricular activities to functional skills? In order to answer this question fully, consider again the impact of their behavior at work or in school. Would Daniel and Jane be successful in adulthood demonstrating their current array of behavior? The answer is no. Jane would eventually lose friends and alienate co-workers, while Daniel would have difficulty remaining on task. These students also require a shift of focus from academic skills to the future social and communication skills necessary to make them successful adult workers.

The major issues individuals with ASD face when transitioning from school to young adulthood are related to the nature of the disorder and its impact on social communication and interaction with others. At the same time, however, these characteristics are not immutable. With careful planning and implementation of an individualized curriculum and evidence-based practices, individuals with ASD can learn to cope with their social communication challenges and manage their own behavior. The next section will review the literature related to important skill sets that are necessary for a successful transition to work, community living, and post-secondary learning.

Pivotal Skills for Transition-Aged Students with ASD

The major issues confronting high school students with ASD then are related to their future independence at work, in university, in their community, and in their home life. ASD affects the individual in every aspect of their life. In order to increase their success in life, it is critical that parents, teachers, and adult support service providers recognize the impact of the disorder in employment, university and/or employer learning situations, community, and home settings. IEPs and other transition planning processes must include skills the person will need as he or she enters adulthood. The challenge in meeting this requirement though is that there is not one pathway to adulthood. There is not a common curriculum of skills necessary in adulthood. A person who is going to a large university will need social and communication skills unique to that setting, while another person who intends to work will need a different set of skills. However, some pivotal skill sets have been

Table 3.1 Pivotal curriculum areas for transition-aged persons with ASD

Pivotal curriculum	Definition	Skills included
Self-determination (Wehmeyer, Agran, & Hughes, 1998)	Fluency in these skills results in the ability to make choices and decisions regarding one's quality of life	Making choices Making decisions Setting goals Solving problems Advocating for self and others Instructing self Demonstrating self-awareness
Self-management (Southall & Gast, 2011)	Fluency in these skills results in the ability to monitor and adjust one's own behavior based upon the situation. It also increases one's ability to learn new behaviors and self-monitor problem behavior	Self-monitoring Self-evaluation Self-recording Self reinforcement
Independence (Wehman & Kregel, 2012)	Fluency in these skills results in the ability to manage one's own health and safety in community settings	Personal care and hygiene Transportation Banking and financial management Recreation Home living Community participation Peer relationships Health and safety
Career development (Schall & Wehman, 2009)	Fluency in these skills results in a person who is aware of and able to match personal strengths to desired careers	Career awareness Career exploration Career preparation Job placement

associated with success in adulthood. These skill sets are pivotal because, when mastered to fluency, they allow the individual to adjust to various situations and contexts. These pivotal skill sets include career awareness, self-determination, self-management, and independence. Table 3.1 provides a description of each skill set.

Skill sets such as self-determination, self-management, independence, and career development are critical curriculum areas for individuals with ASD and are discussed in the next sections.

Self-Determination and ASD

Self-determination describes a set of skills that result in an individual's ability to make life decisions and solve problems related to life goals (Wehmeyer & Powers, 2007). A person is "self-determined" when they can make their own choices and decisions, solve life problems, set goals, and implement actions to achieve those

goals (Martin & Marshall, 1995). There are impressive research findings developing around the topic of self-determination for students and adults with disabilities (Martin, Dycke, D'Ottavio, & Nickerson, 2007; Thoma, Williams, & Davis, 2005). This literature indicates that students and adults with disabilities who receive education and training in self-determination have higher academic productivity, better employment outcomes, and better problem-solving skills (Goldberg, Higgins, Raskind, & Herman, 2003; Konrad, Fowler, Walker, Test, & Wood, 2007; Wehmeyer & Powers, 2007). These findings demonstrate the importance of teaching the component skills that result in self-determination to students with disabilities (Wehmeyer, Gragouda, & Shogren, 2006).

At the same time, individuals with ASD may have difficulty mastering self-determination due to the nature of their disability. Specifically, mastery of self-determination requires the development of communication and social interaction to assure that the individual is able to self-advocate and self-direct his or her own life. These are also core deficits in ASD. The fact that these challenges are present neither diminishes nor negates the importance of self-determination in the life of a young adult with ASD. Rather, it behooves transition educators and support providers to address these deficit areas from the perspective of self-determination. That is, when teaching communication, it should be through the lens of self-determination. Educators of students of all ages can accomplish this task by teaching persons with ASD to communicate the essential functions of behavior. Rather than focusing on labeling items or objects, educators encourage self-determination when they teach students with ASD to communicate their choices, ask for help, request a break from difficult tasks or environments, and request attention from those with whom they want to interact. By focusing on these types of messages, educators support self-determination in their students.

This holds for students across the spectrum of ASD. For those with more significant communication challenges, the link between communication and self-determination is clear. For those who have Aspergers disorder, though, the same holds true. In the previous scenario where Justin told his teacher to "back off!" this may appear, on the surface to be "self-determined." Realistically though, this is a rough attempt at expressing his need for a break. He will likely find more success if he learns to monitor his behavior and express his needs in a way that draws those who would help to his cause. Improving his social communication skills would also improve his ability to become self-determined.

Self-Management

Self-management is a specific skill within the self-determination curriculum that bears special mention for individuals with ASD. All of the scenarios described above involve behavior that ranges from mildly inappropriate to fully unacceptable. While these types of behaviors may be more manageable in the context of school, they can be extremely disruptive in a workplace or community location. Thus, it is

essential that educators mindfully move from providing direct behavior support for individuals with ASD to teaching them to monitor their own behavior and access their own supports.

Self-management is an empirically based procedure that individuals with a variety of disabilities, including those with ASD, have used to change their own behavior (Cooper, Heron, & Heward, 2007; Couglin, McCoy, Kenzer, Mathur, & Zucker, 2012; Sheffield & Waller, 2010). Self-management is an effective technique to increase targeted replacement behaviors, adaptive social skills, communication skills, and school and vocational skills (Southall & Gast, 2011). When an individual is adept at self-management, they are frequently able to generalize behaviors between contexts, adjust behavior based upon situations, and develop behaviors to cope with difficult situations (Lee, Simpson, & Shogren, 2007). As Lee, Simpson and Shogren demonstrate in their meta-analysis of self-management for students with ASD, "Self-management strategies empower students to control their own behavior instead of relying on parent or teacher prompts or external interventions…" (2012, pp. 2–3). For transition-aged youth and young adults with ASD, the use of self-management is essential due to the frequent lack of access to continuous support in work, university, or community settings (Getzel & Wehman, 2005; Schall, 2010). As students enter high school, educators should rapidly move from externally cued behavior supports to self-management.

Independence in Functional Skills

Andre is a 32-year-old man who was diagnosed with Aspergers disorder at the age of 28 years old. He was seeking therapy for long-term unemployment and underemployment. Although he had successfully completed a bachelor's degree in chemical engineering, he struggled throughout his life interacting successfully with others. In fact, his peer interaction skills were so poor that he lost numerous jobs due to a failure to "work as a team player" or "get along with co-workers." Co-workers reported that Andre was rude, abrupt, disorganized, and frequently came to work disheveled without having showered or even brushed his teeth. His personality and lack of personal hygiene skills made others at work avoid him. He reported that his supervisors said he could "do the work well and was rarely, if ever, absent, but he was too offensive to other employees to be successful." Andre's story is unfortunately all too often the case for adults with ASD (Hurlbutt & Chalmers, 2004; Shogren & Plotner, 2012). His story also illustrates a little acknowledged challenge for persons with ASD. Specifically, regardless of the individuals intellectual abilities, individuals with ASD frequently struggle with every day functional skills. According to Wehman et al., functional skills are those skills that make it possible "for students to participate in current and future environments" (2012, p. 6). Andre and many others with ASD may be able to function in the structured and predictable environment of school, but struggle to function successfully in employment, relationships, or community environments. Therefore for all transition-aged students

with ASD, even for those students with ASD who have average or above average academic abilities, it is important to provide structured instruction in the essential functional skills the person will need in the next stage of life (Wehman et al., 2009).

Given the learning needs of individuals with ASD, it would be nearly impossible to teach these skills in the vacuum of high school. The rules and consequences in a school environment are contrived and do not reflect the real risk associated with problem behaviors in work and community environments. Additionally, individuals with ASD have difficulty generalizing skills between settings. Thus, all students across the ability spectrum require experiences in community, employment, and higher education environments while in high school to the degree that these experiences are a part of their vision for their future (Schall & Wehman, 2009). The best way to accomplish this is through internships in employment and dual enrollment in community college or university programs while in high school (Getzel, 2005). Some exemplary programs that offer such experiences include Project SEARCH, a community-based employment emersion model, and Mason Life and ACE-IT, integrated college experiences for young adults with intellectual disabilities including ASD (ACE-IT in College—Programs—VCU Partnership for People with Disabilities, 2012; Mason, 2010; Schall, Target, & Wehman, 2013). Programs such as these offer students the opportunity to experience work or college life while still receiving publicly funded special education services. This provides two advantages. Firstly, the students learn skills they will need in their future in the environments where those skills are needed. Secondly, special educators supporting those students learn about their skill needs in future environments. Such experiences lead to better futures planning for both the students with ASD and their IEP team (Schall, 2009).

Career Development

Career development is a lifelong process where individuals with or without disabilities discover and gradually gain skills to become employed in a chosen career. For most individuals without disabilities, this process starts as early as preschool when children pretend to work the careers of admired adults around them. Career awareness leads to career exploration through middle and early high school when youth without disabilities begin to work odd jobs and complete household chores. Finally, by high school and through post-secondary educational training youth and young adults engage in career preparation when they gain the skills necessary to obtain a job in the career of their choice (Wehman et al., 2012). For students with ASD, however, this developmental sequence from pretend play to exploration to career preparation is frequently absent (Schall & Wehman, 2009). These critical developmental experiences are missing or practiced to a lesser degree. Thus, students with ASD have difficulty identifying suitable career choices by the time they reach transition age (Seltzer, Shattuck, Abbeduto, & Greenberg, 2004).

The purpose of including career development activities in the high school curriculum is to increase the person's ability to match their strengths, preferences, and

Table 3.2 Pivotal curriculum areas and suggested educational activities

Pivotal curriculum area	Suggested educational activities
Self-determination	• Provide multiple choices across the day to teach choice-making skills • Have students set and evaluate their progress toward daily and weekly goals • Plan a daily problem (i.e., lock the classroom keys in the room, forget to bring lunch) then have the students help solve the problem • Have students volunteer to help another group in the school or community • Have students develop their own learning activities to teach others in the classroom • Assist students in identifying and keeping a log of their own strengths, preferences, and interests
Self-management	• Have students define required behaviors in various setting in the school or community • Teach students to collect data on their own behavior • Teach students to reinforce themselves when they have accomplished a difficult task or mastered skill
Independence	• Build an ample array of community activities into the school program to practice community independence • Teach students to develop a personal budget • Have students participate in school stores and after school activities to practice functional skills
Career development	• Develop a rich array of exploratory and embedded internship experiences that allow students to learn about careers • Encourage internships for all students with ASD, even college-bound students • Encourage dual enrollment in university or community college coursework for all students with ASD, even students seeking employment • Establish formal collaborative relationships with vocational rehabilitation offices and community services agencies who can provide additional opportunities for students to experience employment and community supports

interests to a chosen career path. When students with ASD graduate from high school or college without these experiences, they have a very immature understanding of work. This then may lead to repeated failures as the individual with ASD attempts to "catch-up" in their understanding of their personal strengths and match them with a desired career. By that point, the person with ASD, like Andre, has encountered so much failure at work that they are increasingly less likely to attempt employment. In order to change this pattern, educators must provide a rich array of community-based experiences to help the person with ASD learn about himself or herself as a worker and use that experience to inform their career choices. Yet again, this set of curricular experiences applies across the ability spectrum of ASD. Table 3.2 presents each of these pivotal curriculum areas with suggested experiences to support their learning.

Those knowledgeable about ASD and curricular components of educational programming may be wondering where the curricular description for communication

and social skill development is located in this discussion. In fact, each of the pivotal areas described above include significant doses of communication and social skills embedded in the related tasks. When a person with ASD learns to advocate for himself or herself, they are practicing and communicating their needs in a socially assertive manner. When a youth with autism implements a self-management program, he or she is practicing social skills to replace problem behavior. Likewise, learning community skills that will increase independence and focusing on career development activities will result in identifying essential social and communication skills to increase the person's future success at work and in his or her community.

Educators can ensure that students with ASD are college or career ready upon graduation from high school by teaching and providing rich curricular experiences in each of these four pivotal areas. While this will address much of the challenges students with ASD encounter because of their disability, it does not ensure that adequate individualization occurs in planning or implementation of the educational program. The next section will discuss the transition process and the components of an exemplary transition program for students with ASD.

Elements of Exemplary Transition Programs for Students with ASD

The previous section discussed essential curriculum elements that teach the necessary skills for success in employment and college. While these skill areas are necessary, they are not enough by themselves to increase success of young people with ASD in adulthood. In addition to an excellent series of curricular activities and experiences, an exemplary program requires a number of other elements. They include:

- Strength-based assessment and person-centered planning
- Collaboration with the person with ASD, their family, and relevant adult services agencies
- Intensive, behaviorally based teaching strategies in generalized environments

Each is described in the next sections.

Strength-Based Assessment and Person-Centered Planning

Through elementary school and middle school, educational planning for students with ASD tends to be deficit based. That is, assessments designed for students with ASD focus on deficit skills or missing developmental milestones (cf: Sundberg, 2008). While this approach may be appropriate for younger children, once the individual enters transition age, it is time to move from a deficit focus toward a futures planning focus (Schall & Wehman, 2009). Such a shift in focus frequently results in the eventual selection of a career path.

As students with ASD enter high school, it is time to focus on those skills and abilities that increases the individual's employment and college readiness (Sitlington,

Neubert, Begun, Lombard, & Leconte, 2007; Wehman, 2011). For individuals with more significant disabilities, this might mean a strong shift from an academically focused curriculum to a functional skills curriculum (Wehman & Kregel, 2012). For college-bound students, this should include dual enrollment, community and work experiences to increase the students' ability to make informed career selections (Getzel & Wehman, 2005). Thus, assessments at this age must also shift from a focus on deficits to a focus on strengths and employable skill sets. Sitlington et al. define transition assessment as "an ongoing process of collecting information on the student's strengths, needs, preferences, and interests as they relate to the demands of current and future living, learning, and working environments" (2007, pp. 2–3). Schall recommends that transition teams rely on community-based structured observations over standardized tests or interest inventories due to the challenges of individuals with ASD generalizing skills and engaging in imaginative interactions with others (Schall, 2009). Such tools would include community-based vocational assessments, community-based observations, ecological inventories, and situational assessments.

Once an assessment is complete, transition planning should focus on the use of person-centered planning processes. Person-centered planning describes a set of values and derived processes that make every effort to include persons with disabilities in life planning to mitigate barriers such as communication difficulties and self-consciousness sharing personal dreams and goals in the presence of others who may minimize them. Person-centered planning strives to assist individuals with disabilities in planning processes that lead to persons with disabilities experiencing self-directed lives. One of the goals of person-centered planning is to include the person with disabilities as a partner in planning his or her own supports and services (Sax, 2002). Some person-centered tools that have been used for this purpose include:

- Planning Alternative Tomorrows with Hope (PATH) (Forest & Pearpoint, 1992)
- Personal Futures Planning (Mount, 2000)
- Personal Lifestyle Planning (Smull, 2005)

Such tools are likely to result in a sound transition plan that results in outcome-based goals and action plans that move the team toward accountability.

Collaboration with the Person with ASD, Their Family, and Relevant Adult Services Agencies

Individuals in transition from school to adulthood also require the support and services of a wide array of adult services providers. In addition, youth with ASD in transition to adulthood required a skilled team that can help them move into the adult world of work and/or higher education (Grigal, Hart, & Migliore, 2011). In fact, involving community agencies and organization that can support individuals in transition is consistently identified as a core practice for successful transition to adulthood (Schall et al., 2012). Schall et al. note that the transition team must

include the person with ASD and their parents as well as an interdisciplinary team of individuals with a variety of skills (2013). Those skills include teaching communication and social skills, coordinating with community agencies, analyzing behavior and developing instructional and behavior support plans, connecting the individual with potential employment, and/or post-secondary education, teaching functional skills, and facilitating person/student-centered planning (Schall et al., 2013). They note that these skill sets and activities should be shared among a team of people during transition planning meetings (Schall & Wehman, 2009).

Intensive, Behaviorally Based Teaching Strategies in Generalized Environments

According to IDEA, transition planning is meant to be an outcomes-oriented process. In fact, IDEA 2004 define transition services as follows:

The term "transition services" means a coordinated set of activities for a child[1] with a disability that:

- Is designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment); continuing and adult education, adult services, independent living, or community participation.
- Is based on the individual child's needs, taking into account the child's strengths, preferences, and interests.
- Includes instruction, related services, community experiences, the development of employment, and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation [34 CFR 300.43 (a)] [20 U.S.C. 1401(34)].

By definition, high school students with or without disabilities are preparing to generalize and apply skills learned throughout their school careers to new community or higher education environments. As educational teams contemplate this process for students with ASD, it is important to consider the learning challenges faced by individuals with ASD and apply that knowledge to the transition process. Table 3.3 lists the learning challenges faced by individuals with ASD and their impact on transition to adulthood.

All of the learning characteristics described in Table 3.3 indicate the need for highly structured, intensive teaching strategies that occur in natural environments. The following strategies have been identified as evidence-based practices that would

[1] Author's note: The 2004 reauthorization of IDEA changed the term "student" to "child." Throughout this chapter, we will refer to transition aged individuals as "students" and not "children." In this case, however, we are quoting the regulations as written.

Table 3.3 Learning challenges for individuals with ASD and their impact on transition

Learning challenge	Impact on transition
Requires high frequency of learning opportunities to master skills	Individuals in transition accelerate learning and apply skills in work and educational environments. Individuals with ASD require more practice to learn and acquire skills
Difficulty generalizing skills from one environment to another	Individuals in transition must generalize skills learned in multiple settings across time to new environments. Individuals with ASD frequently require direct training in new environments to generalize skills
Requires learning to be taught precisely as it will be displayed with materials and equipment exactly as it will be used (high salience)	Individuals in transition are able to display skills across different sets of materials and equipment. Individuals with ASD frequently require a much higher "salience to stimuli" in order to become independent on acquired skills
Once skills are mastered, may need more practice and time to achieve fluency	Fluency is a critical component in work and post-secondary education (e.g., production rate). Individuals with ASD require additional practice to achieve fluency of skills

meet this criterion (Briefs/autismpdc.fpg.unc.edu, n.d.; Wehman, Schall, & McDonough, 2013):

- Modifying the environment, antecedents, or setting events to prevent the need for challenging behavior or increase the use of adaptive behavior.
- Using tablet computers or applications to teach academic, social, and communication skills.
- Indentifying the function of a specific problem behavior through the functional behavior assessment process (FBA).
- Providing cues, prompts, and instruction in natural environments to elicit and reinforce communication and social behaviors.
- Strengthening desired behaviors by providing a consequence that increases the likelihood that the behavior will occur again.
- Teaching the individual to identify, monitor, and self-reinforce desired behaviors while tracking and eliminating undesired behaviors.
- Providing practice of social skills and social interactions in a group with an adult facilitator.
- Teaching skills with many steps a few steps at a time with reinforcement following each step.
- Providing an array of information in visual formats including the daily schedule and steps to complete a task, social behaviors, communication supports, and how to transition between activities.

Finally, and perhaps most importantly, transition-aged students with ASD benefit tremendously when these practices are applied to teaching skills in natural settings

where they will be used. Thus, intensive internship experiences (i.e., Project SEARCH or through dual enrollment in university classes while still in high school), represent the final critical element in exemplary transition programs (Schall, 2010; White, Ollendick, & Bray, 2011).

This section of the chapter reviewed the characteristics of exemplary transition programs. Yet, even with all of these elements available to youth with ASD, it is likely that such individuals will struggle with transition to employment or post-secondary education. The next section of this chapter, then will discuss the exact services and supports available through adult service agencies.

Adult Services and Supports

Youth in the transition process have potential access to a variety of community training, employment, and support programs. These programs offer an array of service coordination assistance, employment services, and funding possibilities; however, they operate under different federal, state, and local laws; regulations; policies; and service arrangements. The key to a successful transition outcome is early involvement with these programs during the planning process.

Becoming fully educated about the resources and service relationships that characterize community framing, employment, and support programs available to individuals in transition is a critical first step for students, families, and transition teams. Next, team members should identify the primary community agencies and work to incorporate these programs into transition IEP. The primary case management/service coordination resource among the agencies should be identified. This role might be taken on by different agencies depending on the nature of an individual's disability and core service needs and/or local eligibility requirements. Early transition planning can help to establish these key relationships with community agencies and establish the primary and secondary-level participation needed by each to support a successful employment outcome.

State Vocational Rehabilitation Services

The Rehabilitation Act of 1973 (PL 93-112), as amended in 1998 (PL 105-220), provides federal grants for states to operate comprehensive programs of VR services for individuals with disabilities. VR is a cooperative program between state and federal governments that exists in all 50 states, the District of Columbia, and the US territories. It should be a core transition resource for youth with disabilities throughout the transition process. VR provides an array of services and supports

focusing specifically on achievement of an employment outcome, including but not limited to the following:

- Assessment for determining eligibility for VR services
- Vocational counseling, guidance, and referral services
- Vocational and other training, including on-the-job training
- Personal assistance services, including training in managing and directing a personal assistant
- Rehabilitation technology services
- Job placement services and supported employment services

A VR agency also provides direct services, such as counseling, guidance, and job placement assistance, and it will be usually arranged with other community providers to obtain services such as rehabilitation technology and supported employment. The ability of a VR agency to reach into the community for individualized services is one of its key strengths. VR agencies are well positioned to serve as the service coordination hub for employment-oriented community services for eligible youth with disabilities.

Community Rehabilitation Programs

Community rehabilitation programs (CRPs) are usually not-for-profit or for-profit private agencies that assist people with disabilities in obtaining and maintaining competitive employment. Specific services offered by providers will vary; many offer career counseling, assessments, benefits counseling, job placement, and supported employment services designed to assist individuals with disabilities to live and work in the community. Since many CRPs obtain much of their funding through contractual arrangements, access to their services can require a funding authorization from an agency such as VR.

CRPs can provide a variety of employment-related services such as assistance with exploring potential job and career options, job preparation, job development, and job placement services. Staff might assist individuals with job interview practice, job-seeking skills, resume preparation, guided job searches, and negotiations with employers. For example, perhaps an employer has an available job that includes multiple duties. Some of these duties match well to the abilities of the job applicant with a disability; others are a poor match for the applicant. The employment consultant, with the permission of the applicant, might work with the employer to negotiate a customized job carved out of the original job description that is a good match for the individual with a disability. Once the job match is completed, the employment consultant can assist with training at the job site, help the worker with a disability adjust to job demands, and provide ongoing support as needed to help maintain the job or assist with a job change.

One Stop Career Centers

The Workforce Investment Act (WIA) of 1998 (PL 105-220) created One Stop Career Centers (or "One Stop Centers") as a key employment resource in the community. The One Stop Centers have core services that are available to anyone in the community who needs help in locating employment. These core services mainly involve access to self-directed job searches through an information center that contains information on available job openings in the community. For those individuals who are eligible for more intense services through the One Stop Center, a variety of individualized services are potentially available, including access to vocational training and assistance with job placement.

Youth and young adults with disabilities are targeted for services through One Stop Centers. Therefore, One Stop Centers can serve as a significant resource for youth with disabilities and transition teams in the development of the transition plan. One Stop Center staff, such as plan managers and disability program navigators, can assist in planning employment-related services, including reaching into the community to identify and acquire other needed transition services. By design, One Stop Centers frequently serve as a home base for many community partners, such as VR and representatives of CRPs that colocate staff within the One Stop setting.

One Stop Centers have job listings identifying available employment opportunities. Information from interest inventories can help guide a job search. For individuals who need accommodations to access job information through, for example, computerized job search resources, One Stop Center workstations are frequently equipped with accessibility kits that accommodate a variety of disabilities (Gervey, Gao, & Rizzo, 2004). One Stop Centers offer job clubs, where an individual looking for employment can get support and information from peers and a group facilitator. Some One Stop Centers have employment resource staff who will represent the job interests of an individual with a disability to a potential employer and help negotiate a job opportunity (Targett, Young, Revell, Williams, & Wehman, 2007). Additional employment services of potential value to youth in transition include paid and unpaid work experiences, occupational skills training, job placement, and follow-up services after employment to help with job retention and career development. Funding for employment services through a One Stop Center occurs frequently through the center's direct links with the other community agencies that fund employment services, such as VR and CSBs.

Conclusion

As evidenced by the dismal outcomes currently experienced by transition-aged youth with ASD, the need for improved transition services that result in employment and success in post-secondary education is past due. The material in this chapter has discussed critical issues, described pivotal curriculum skills, characteristics

of exemplary programs, and essential adult services and supports. It is time now, for educators and adult services staff to implement exemplary transition services and supports for this able group of individuals.

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